

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

DATE MAILED: 04/15/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/975,054	10/12/2001	Eishi Matsuda	KN-65-US	1008	
466	7590 04/15/2003				
YOUNG & THOMPSON			EXAMINER		
745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202		)K	CUNNINGHA	CUNNINGHAM, TERRY D	
			ART UNIT	PAPER NUMBER	
			2816		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
• <i>&gt;</i>		09/975,054	MATSUDA, EISHI			
	Office Action Summary	Examiner	Art Unit			
		Terry D. Cunningham	2816			
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with	n the correspondence address			
THE I - Exter after - If the - If NO - Failu - Any r	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Issions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by statute eply received by the Office later than three months after the mailing dipatent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a rep y within the statutory minimum of thirty vill apply and will expire SIX (6) MONTI , cause the application to become ABA	oly be timely filed  (30) days will be considered timely.  HS from the mailing date of this communication.  NDONED (35 U.S.C. § 133).			
1)	Responsive to communication(s) filed on	·				
2a)🛛	This action is <b>FINAL</b> . 2b) ☐ Th	is action is non-final.	•			
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims						
4)🖂	Claim(s) 1-10 is/are pending in the application	1.				
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	Claim(s) is/are allowed.					
6)🖂	6)⊠ Claim(s) <u>1-10</u> is/are rejected.					
7)	Claim(s) is/are objected to.					
8)□	Claim(s) are subject to restriction and/o	r election requirement.				
Applicati	on Papers					
9) 🗌 -	The specification is objected to by the Examine	r.				
10) 🗌 -	The drawing(s) filed on is/are: a)☐ accep	oted or b) objected to by the	e Examiner.			
	Applicant may not request that any objection to the	e drawing(s) be held in abeyar	nce. See 37 CFR 1.85(a).			
11) 🗌 -	The proposed drawing correction filed on	_ is: a)□ approved b)□ dis	sapproved by the Examiner.			
	If approved, corrected drawings are required in re	-				
12) 🔲 -	The oath or declaration is objected to by the Ex	aminer.				
Priority u	ınder 35 U.S.C. §§ 119 and 120					
13)🔯	Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C. §	119(a)-(d) or (f).			
a)[	☐ All b)☐ Some * c)⊠ None of:					
	1. Certified copies of the priority document	s have been received.				
	2. Certified copies of the priority document	s have been received in Ap	plication No			
* S	3. Copies of the certified copies of the prio application from the International Buse the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).	•			
14) 🗌 A	cknowledgment is made of a claim for domesti	c priority under 35 U.S.C. §	119(e) (to a provisional application).			
	The translation of the foreign language pro					
Attachment		•				
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) _	5) Notice of Int	ummary (PTO-413) Paper No(s) formal Patent Application (PTO-152)			
S. Patent and Tr PTO-326 (Re		etion Summary	Part of Paper No. 5			

Art Unit: 2816

#### **DETAILED ACTION**

# Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification fails to adequately disclose how to make and use the claimed circuit. The specification only discloses blank boxes for each of the elements 11-15. Further, the specification fails to adequately describe the operation of each of the disclosed elements. If elements having the broad text meanings were known in the art to have well known specific construction, then blank box only description is acceptable. However, since this is not the case, it is not seen that the invention is enabled. As an example, the figures show element 11 having the text label CONVERTER CIRCUIT, which is only describe as having the operation converting a DC voltage to a DC voltage. However, the specification in no way states the type or value of the output voltage of the converter. Since the specification fails to disclose any specifics concerning how to make and use the boxes shown in the figures, it is not seen that the specification adequately enables the specification.

Examiner has fully considered Applicant's remarks for the above rejection and has not found them to be persuasive. Applicant has merely added disclosure to state that the element is a

Art Unit: 2816

"DC-DC converter" and that such "description would be appreciated by one skilled in the art". However, this is not seen to affect the rejection. While the phrase "DC-DC converter" is well used in the art, it in no way provides any specifics and to what such is intended to comprise. There a massive amount of elements in the art, all having significantly differing structure, that are known as "DC-DC converters". Without providing more specifics concerning exactly what this element is or what such is intended to do, it is not seen that one skilled in the art can make and use the invention without "undue experimentation".

Claims 1-10 are rejected under 35 U.S.C. § 112, first paragraph, as based on a disclosure which is not enabling. With respect to claims 1-3, the "second differentiating circuit" and the "current injecting circuit" are deemed critical or essential to the practice of the invention, but is not included in the claim(s). With respect to claims 4-6, the "first differentiating circuit" and the "current absorbing circuit" are deemed critical or essential to the practice of the invention, but is not included in the claim(s). An arrangement lacking this feature is not enabled by the disclosure since it cannot be understood from the specification how the circuit will operate without such. *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

Examiner has fully considered Applicant's remarks for the above rejection and has not found them to be persuasive. Applicant states that "the recited elements alone are believed to be enabled". However, Applicant fails to provide any justification whatsoever for this statement. It is not seen nor has Applicant established that the specification will enable one skilled in the art to make and use the invention with only the recited elements.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2816

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10 are rejected under 35 U.S.C. §102(b) as being anticipated by Doluca et al. (USPN 4,769,784). Doluca et al. discloses, in Figs. 2-3, a circuit comprising: "a DC-DC converter circuit (Fig. 3)"; "a first differentiating circuit (39 and 43)"; "a current absorbing circuit (45)"; "a second differentiating circuit (31 and 35)"; "a current injecting circuit (37)"; and "an output (19)", all connected and operating similarly as recited by Applicant.

Examiner has fully considered Applicant's remarks for the above rejection and has not found them to be persuasive. Additionally, Applicant's remarks are not clearly understood. Firstly, a "charge pump" (e.g., as in Fig. 3) is notoriously well known and commonly referred to in the art as a "DC-DC converter". Further, Applicant's remarks concerning elements 39,43 and 31,35 being "differentiated circuits" are not understood. Comparator circuits are well known and commonly referred to in the art as "differentiating circuits". Clearly, the elements differentiate the difference between the voltage on the output 19 and VREF.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2816

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

# Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terry Cunningham whose telephone number is 703-308-4872. The examiner can normally be reached on Monday-Thursday from 7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 703-308-4876. The fax phone numbers for Technology Center 2800 are 703-872-9318 for Before Final communications and 703-872-9319 for After Final communications. Please note, any faxed paper clearly stating **DRAFT** or **PROPOSED AMENDMENT** at the top will be forwarded directly to the Examiner. All others will be treated as a formal response and acted upon accordingly.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703-308-0956.

TC April 14, 2003 Terry D. Cunningham Primary Examiner Art Unit 2816